

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

April 16, 2012

TO: Internal File

THRU: Steve Christensen, Permit Supervisor

FROM: April A. Abate, Environmental Scientist III *AAA*
5-3-2012

RE: Proposed Replacement Well, Savage Services Corporation, Savage Coal Terminal, C/007/0022, Task ID #4077

SUMMARY:

On April 6, 2012 the Division received a proposal from Savage Services Corporation (the Permittee) to install a replacement well for S-1-GW located in the northwest corner of the permit area. This well was initially installed in approximately 2007 and has never produced any groundwater data. This submittal is the result of the Permittee's commitment during the 2012 midterm review to install a replacement well for S-1-GW to better characterize groundwater conditions in the northwest corner of the permit area.

Findings:

The Permittee has made a commitment to install a replacement well for S-1-GW at the request of the Division because it was not producing any useful groundwater data. In addition to the edits to the MRP submitted in redline for this amendment, once well S-3-GW is installed and S-1-GW is decommissioned, the Permittee should also update Section 731-212 of the MRP and page 5 of the PHC changing well S-3-GW from "proposed" to installed.

In turn, the Division will update the Division water database to list S-1-GW as an inactive monitoring location and will add S-3-GW as a new groundwater monitoring sampling point.

RECOMMENDATIONS:

Conditional Approval of the amendment is recommended. Final approval will be granted once the well installation and decommission activities have been completed and the appropriate updates to the MRP are submitted.

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Groundwater Monitoring Plan

The Permittee submitted a redline version of Section 731.200 of the MRP detailing their intent to install a replacement well for nonproducing groundwater monitoring well S-1-GW. This well and S-2-GW were both installed in 2007 to assess groundwater flow conditions on the east side of the permit area. Groundwater gradient direction has been determined to flow toward the northeast.

The water monitoring program table has been submitted in redline to show that S-3-GW will replace S-1-GW as a quarterly sampling location.

Casing and Sealing of Wells

The Permittee has submitted a redline version of Section 748 of the MRP indicating that the dry well, S-1-GW will be decommissioned using proper backfilling and grouting techniques once S-3-GW is installed.

Probable Hydrologic Consequences

The PHC was recently updated as part of the 2012 midterm permit review. The PHC discuss a water table identified in the weathered/alluvial zone above the Bluegate member of the Mancos Shale formation.

Well Maps

Plate 7-1 – Water Monitoring Location Map was submitted to show the proposed S-3-GW site in the extreme northeast corner of the site close to the pump house. An alternate location is also pictured on the map in case drilling techniques are not successful at the first location.